temporary use of ether would call forth in the same plant a temporary amitotic division, led Häcker[1] to subject developing eggs to the action of ether to ascertain whether their mitotic division could be converted into a temporary amitotic one. The results of these experiments are that when the eggs of Cyclops are subjected to the action of five per cent ether for from two to three hours, they begin to divide by a process many steps of which have all the appearances of amitotic division, and that after being returned to fresh water they reassume normal mitotic division. Cells, then, after dividing by what to all appearances is amitosis, may return to mitosis. Till further study proves absolute identity the author prefers to call this induced amitosis *pseudoamitosis*.

P.

A New Unattached Hydroid. — In a paper on Woods Holl Hydroids, L. Murbach[2] redescribes *Corynitis Agassizii* and its medusa Gemmaria, and gives an account of a very remarkable unattached hydroid. It is represented by a single unbranched polyp of the Tubularian type with two circles of tentacles. A primitive perisarc envelops the hydrocaulus, at the end of which polyp buds are given off. Sexual reproduction takes place, the gonophores being between the two circles of tentacles. The polyp moves slowly from place to place and may be caught floating in quiet water. The author names it *Hypolytus peregrinus* and forestalls the systematic reviser by the statement: "Should the name here proposed for this new genus be preoccupied, I propose instead Gonohypolytus."

P.

Hydra Grafts. — The grafting of hydras has been studied by H. W. Rand.[3] Lateral grafts do not persist as permanent abnormalities, but either constrict and separate from the stock or are resorbed by it. If the graft is large or has tentacles, it, as a rule, eventually separates from the stock; if it is small and without differentiated parts it may be resorbed. All the pieces that were resorbed were much larger than the minimum piece capable of regenerating if not employed as a graft. Lateral grafts differ from buds in that they do not separate from the stock as readily as buds do

[1] Häcker, V. Mitosen im Gefolge amitosen-ähnlicher Vorgänge, *Anat. Anzeiger*, Bd. xvii, pp. 9–20, 1900.

[2] Murbach, L. Hydroids from Woods Holl, Mass., *Quart. Journ. Micr. Sci.*, vol. xlii, pp. 341–360, Pl. 34, 1899.

[3] Rand, H. W. The Regulation of Graft Abnormalities in Hydra, *Archiv für Entw.-mech.*, Bd. ix, pp. 161–214, Taf. V–VII, 1899.

from parents. The regulation of abnormalities in Hydra appears to be independent of external conditions, and seems to be rather an effect of certain qualities inherited by the organism. P.

Notes. — The third edition of Van Gehuchten's[1] well-known text-book on the nervous system of man has just been published. The work has been increased in bulk and now appears in two volumes of about six hundred pages each. The first volume contains a full account of the gross anatomy of the nervous system, the neurone, and the finer anatomy of the spinal cord; the second volume deals with the finer anatomy of the brain.

No. VII of Vol. III of the *American Journal of Physiology* contains the two following articles: "The Poisonous Character of a Pure NaCl Solution," by Jacques Loeb, and "Observations on the Degeneration and Regeneration of Motor and Sensory Nerve Endings in Voluntary Muscle," by G. C. Huber.

BOTANY.

Minnesota Plant Life.[2] — The broad scope of the botanical work that is being done in Minnesota by Professor MacMillan is evidenced by the present volume. *Minnesota Plant Life* is the third volume of the botanical series of the reports of the natural history survey of the state. Notwithstanding, the book is not only not at all technical in the accepted sense, but, in accordance with the avowed purpose of the author, it is presented in as untechnical and popular a form as possible. Every botanist is quite too familiar with the result of the usual popular presentation of any portion of the subject. Popular treatises on biological science, especially, have come to stand for everything that is loose in thought, inexact in treatment, and antique in doctrine. Matters have practically reached a point where no master in scientific thought will write a popular treatise, and where no mere dilettante is able to write a scientific one. Professor MacMillan's book is proof that it is possible to write popularly,

[1] Van Gehuchten, A. Anatomie du système nerveux de l'homme, tomes i, ii. Louvain, 1900.

[2] MacMillan, Conway, Professor of Botany in the University of Minnesota. St. Paul, *The Pioneer Press*, 1899. 8vo, xxv, 568 pp. Four plates and 240 illustrations.